

LOW LOSS FLOW LIMITED FEED DUCT

ABSTRACT OF THE DISCLOSURE

A duct that preferably includes a low loss inlet section is configured to include one or more flow limiting passages that extend through a portion of the low loss inlet section. The flow limiting passages are located and configured such that in the desired operating flow range of the duct, the fluid exiting the flow limiting passages has minimal effect on fluid flow into and through the duct. However, at relatively high pressure ratios, the fluid exiting the flow limiting passages will disturb the fluid entering the duct, causing mixing and shock losses, which will limit the fluid flow rate into and through the duct.